

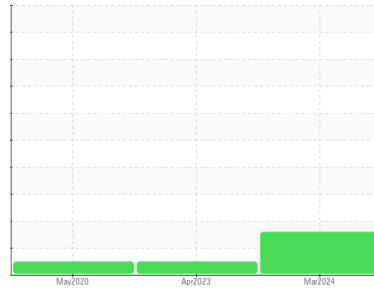


# OIL ANALYSIS REPORT



Area  
**[GTT224-360]**  
 Machine Id  
**CARRIER 3519Q27709**  
 Component  
**Chiller**  
 Fluid  
**TOTALINE POE 220 VS (--- GAL)**

Sample Rating Trend



WATER



## DIAGNOSIS

### Recommendation

If not recently done change any filter driers to reduce moisture level. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

The elevated moisture content is associated with POE oils which are hygroscopic, and can absorb moisture from sampling and processing.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GTT0001789</b>	GTT11639	GTT11640
Sample Date	Client Info		<b>20 Mar 2024</b>	04 Apr 2023	22 May 2020
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >8	<b>5</b>	3	<1
Chromium	ppm	ASTM D5185(m) >2	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m) >3	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m) >2	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m) >8	<b>2</b>	2	<1
Tin	ppm	ASTM D5185(m) >4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	---	---
Calcium	ppm	ASTM D5185(m) 0	<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185(m) 75	<b>45</b>	---	---
Zinc	ppm	ASTM D5185(m) 0	<b>1</b>	<1	<1
Sulfur	ppm	ASTM D5185(m) 25	<b>14</b>	---	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	---	---
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	---	---
ppm Water	ppm	ASTM D6304* >200	<b>360</b>	29	77



## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.01	<b>0.03</b>	0.023	0.014

# OIL ANALYSIS REPORT

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	220	<b>198</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Sample No.** : GTT0001789  
**Lab Number** : 02627153  
**Unique Number** : 5760285  
**Test Package** : IND 2 ( Additional Tests: KV40 )  
*To discuss this sample report, contact Customer Service at 1-905-847-9300 Ext 26.*  
*Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.*  
*Damages: Seller shall in no event be liable for special, incidental, or consequential damages, of a commercial nature, resulting from any cause.*

**Received** : 05 Apr 2024  
**Tested** : 10 Apr 2024  
**Diagnosed** : 10 Apr 2024 - Bill Quesnel

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